Lawrence Rhoades

AMT Chairman

President/CEO

Extrude Hone Corp.

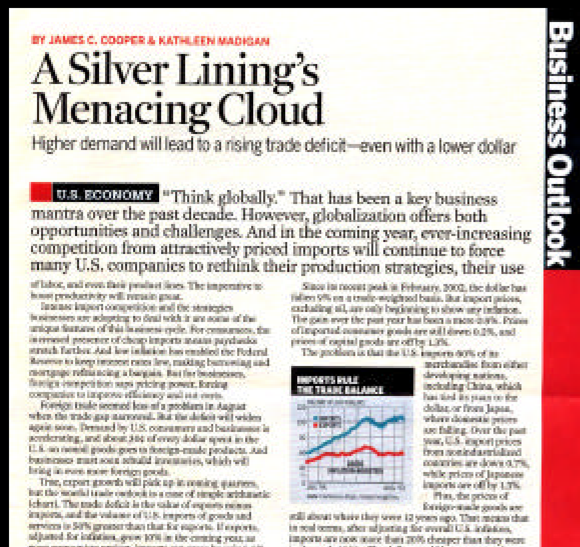
Current State of U.S. Manufacturing

- 2.5 million jobs lost in last 3 years
- Machine tool consumption down 2/3 in past 5 years

How much U.S. manufacturing will be done in 100 Years?

Current State of U.S. Manufacturing

- 1/3 of all manufactured products consumed in the U.S. are imported
- Trade deficit is more than $500 Billion – over 5% of GNP



Business Outlook

BY JAMES C. COOPER & KATHLEEN MADIGAN

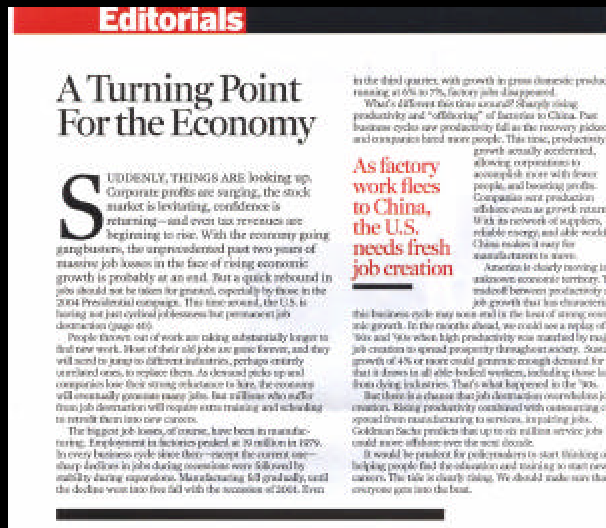
A Silver Lining's Menacing Cloud

Higher demand will lead to a rising trade deficit—even with a lower dollar

U.S. ECONOMY "Think globally." That has been a key business mantra over the past decade. However, globalization offers both opportunities and challenges. And in the coming year, ever-increasing competition from attractively priced imports will continue to force many U.S. companies to rethink their production strategies, their use

Automotive

- Detroit's share of U.S. market has fallen from 84% to 62% in 25 years
- Some of that is foreign made, so…
- Over 50% of the content of cars sold in U.S. is imported



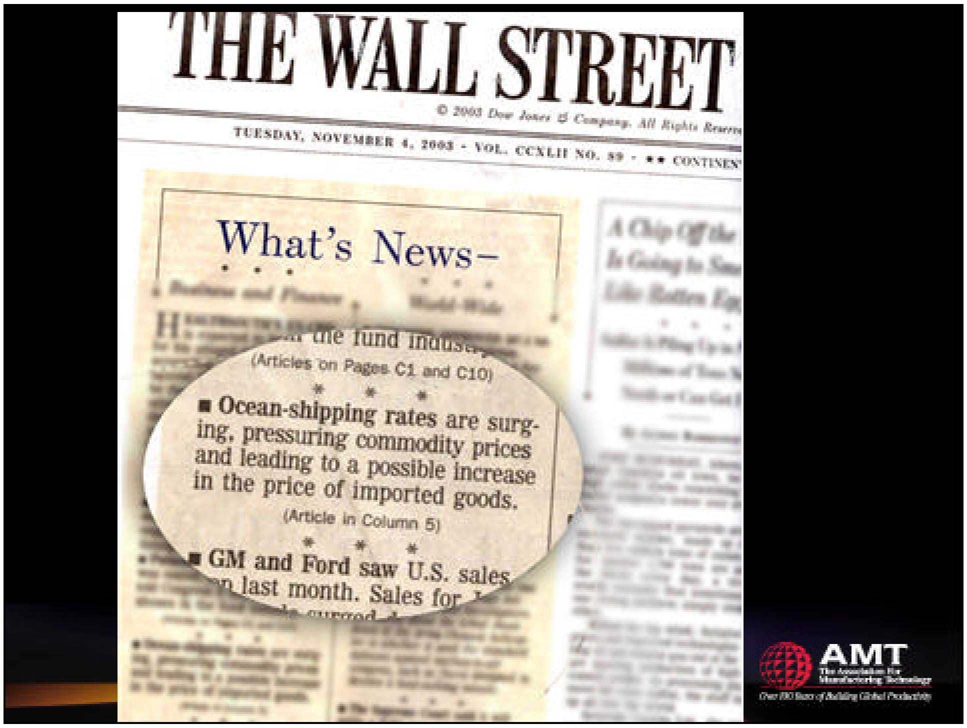
Editorials

A Turning Point For the Economy

SUDDENLY, THINGS ARE looking up. Corporate profits are surging, the stock market is levitating, confidence is returning—and even tax revenues are beginning to rise.

As factory work flees to China, the U.S. needs fresh job creation

How much longer will the U.S. manufacture?



Since the mid 20th Century… entering the global economy has meant

- Moving the products of human effort from an economy where labor is under-valued to an economy where labor is over-valued
- Enabled by reduction in the time and cost of transport
- Dramatic and permanent drop in electronic connection costs

In the 20th Century, for the first time…

- As much as 20% of the world lives in relative prosperity
- In the latter half, some entire nations were self-sufficient and mostly prosperous
- Great differences in economic conditions could be found by crossing a border

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In the 20th Century

- Post-war Europe and Japan rebuilt through manufacturing
- Distribution of global wealth still distorted; 1/5 of world population consumes 4/5 of resources

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China

- For most of the 20th Century, withdrew from the world economic and cultural arena
- Re-entry caused enormous economic disruption in early 21st Century
- From rudimentary self-sufficiency their production became world-class

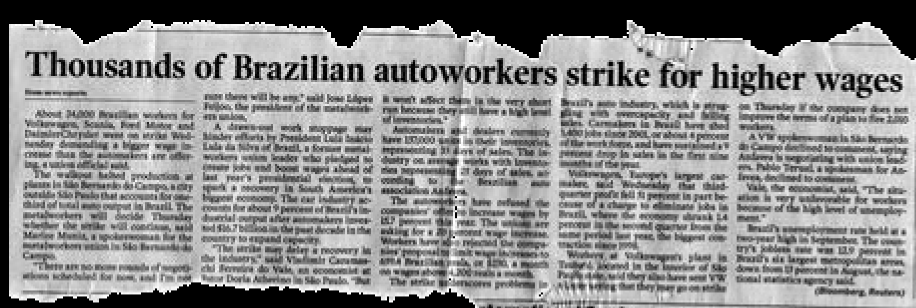
• China	1,200		• U.S.	250
• India	800		• EC	300
• Brazil	200		• Japan	100
• Indonesia	200		• Canada, etc.	50
• Former USSR+ Eastern Europe	400			700 MILLION
	2.8 BILLION			

U.S. virtually self-sufficient in food production

Manufactured products are neither perishable nor easily damaged

Through the 20th Century, freight costs continually fell due to improved "logistics"

- Automotive parts and consumer goods could be transported and distributed globally for no more than 5% to 10% of the cost of making the product



Thousands of Brazilian autoworkers strike for higher wages

World economic growth creates more affluent consumers purchasing more material things

Products are…

- Made with less material, energy and labor
- Smaller, used commonly available materials, more functional than ever before
- Made when and where they are needed… and often customized

Here’s what the Government should do…

The Government!

- Boost nation’s savings rate
- Channel a large percentage of savings into industrial investment
- Put legislation in place for development of manufacturing technologies
  - *1% of trade deficit funds this program*

The Government!

- Focus on manufacturing technology development through NIST/ATP
- Ensure a reasonable return on manufacturers’ investments
- Enhance education programs
- Nurture manufacturing technology developers

The Government!

- Tariffs to offset tougher U.S. regulations


Foul Water and Air Part of Cost
Of the Boom in China's Exports

By JOSEPH KAHN

The Government!

- Make investments in manufacturing technology infrastructure

The Government!

- Recognize that large U.S. manufacturers are global companies that happen to be headquartered in the U.S.

The Government!

- A Cabinet level Department of Industrial Production was established

Here's what the U.S. Manufacturing Technology Industry needs to do…

(regardless of what our government does)

The Industry!

- Recognize that U.S. competitive advantage comes from manufacturing process expertise

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The Industry!

- New business model of "transaction fees and reduced risk" for customers to insure the profitable use of technology

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The Industry!

- Use intellectual property to protect innovative manufacturing methods

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The Industry!

- Bring more science and technology into manufacturing

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The Industry!

- 2103 global manufacturing technology market will be 20 times 2003 in real terms

The Industry!

- Not selling capital equipment outright, but providing the manufacturing process surrounding it, can provide major new revenue streams

The Industry!

- New willingness of customers "to change in order to compete"
- Proven technology and recognized brand names